

## CLAIMS

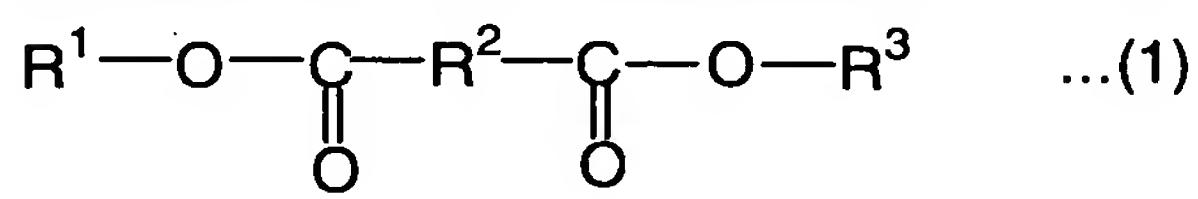
1. An elastin molded article which comprises a fiber structure comprising aliphatic polyester fibers 5 having an average fiber diameter of 0.05 to 50  $\mu\text{m}$  as a supporting base material and crosslinked elastin.

2. The elastin molded article according to claim 1, wherein the aliphatic polyester is a polylactic acid, 10 a polyglycolic acid, a polycaprolactone or a copolymer thereof.

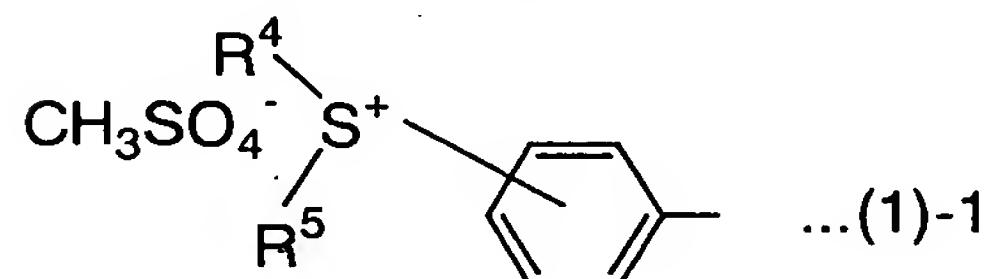
3. The elastin molded article according to claim 1, wherein the fiber is a surface smooth fiber, a porous 15 fiber or a hollow fiber.

4. The elastin molded article according to claim 1, wherein the crosslinked elastin comprises a product resulting from a reaction of water-soluble elastin with 20 at least one crosslinking agent.

5. The elastin molded article according to claim 4, wherein the crosslinking agent is a water-soluble compound represented by the following formula (1):



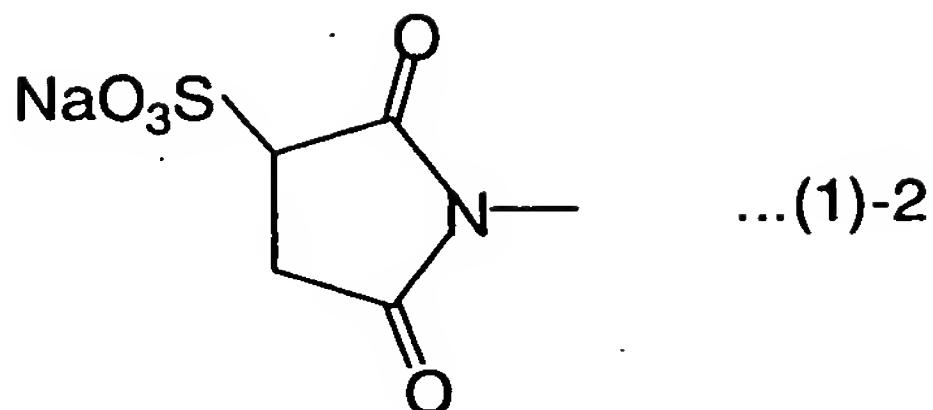
wherein  $\text{R}^1$  and  $\text{R}^3$  each independently represent a structure represented by the following formula (1)-1:



wherein  $\text{R}^4$  and  $\text{R}^5$  each independently represent H,  $\text{CH}_3$  30 or  $\text{C}_2\text{H}_5$ ,

or a structure represented by the following formula

(1) - 2 :

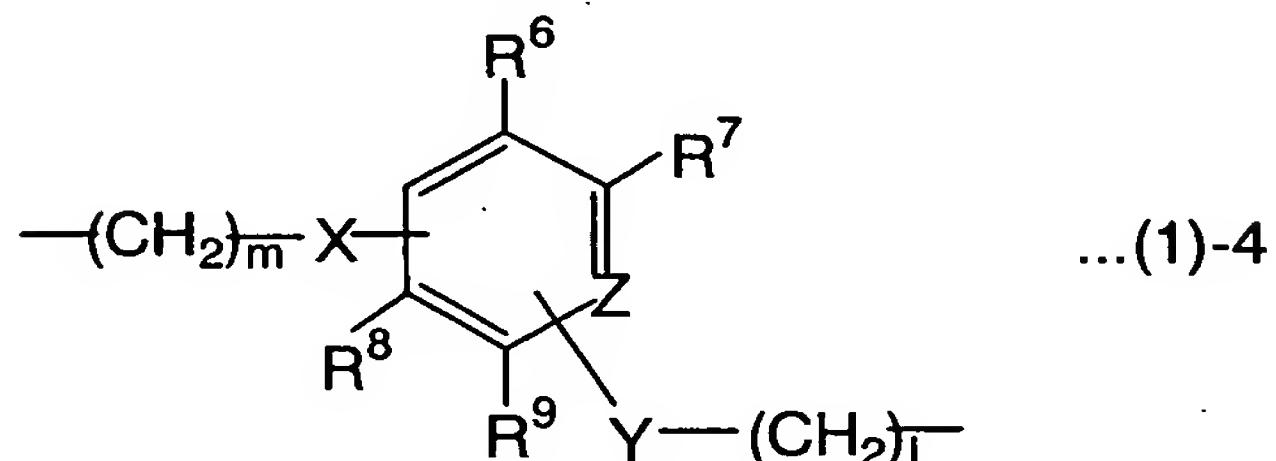


and, R<sup>2</sup> represents a structure represented by the following formula (1)-3:

5     —(CH<sub>2</sub>)<sub>n</sub>     ...(1)-3

wherein n is 1 to 20,

or a structure represented by the following formula (1)-4:



10    wherein m and l each independently represent an integer of 0 to 15, X and Y each independently represent CH<sub>2</sub> or O, Z represents C or N, and R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> each independently represent H, CH<sub>3</sub> or C<sub>2</sub>H<sub>5</sub>.

15       6. The elastin molded article according to claim 1, wherein the crosslinked elastin further contains at least one selected from the group consisting of a protein, a polyamino acid, sugar and a cell growth factor.

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7. The elastin molded article according to claim 6, wherein the protein is collagen, gelatin, fibronectin, fibrin, thrombin or laminin.

25       8. The elastin molded article according to claim 6, wherein the polyamino acid is a polylysine or a

polyglutamic acid.

9. The elastin molded article according to claim 6, wherein the sugar is hyaluronic acid, chondroitin 5 sulfuric acid, heparin, alginic acid, chitin, chitosan, cellulose or starch.

10. The elastin molded article according to claim 6, wherein the cell growth factor is FGF (fibroblast 10 growth factor), EGF (epidermal growth factor), PDGF (platelet-derived growth factor), IGF (insulin-like growth factor), VEGF (vascular endothelial growth factor), TGF- $\beta$  ( $\beta$ -type transforming growth factor), NGF (nerve growth factor), HGF (hepatocellular growth 15 factor) or BMP (bone morphogenetic factor).

11. A method for producing an elastin molded article characterized in that crosslinked elastin is formed by impregnating a fiber structure comprising 20 aliphatic polyester fibers having an average fiber diameter of 0.05 to 50  $\mu\text{m}$  with water-soluble elastin and at least one crosslinking agent and by causing a crosslinking reaction.

25 12. The method according to claim 11, wherein the fiber is a surface smooth fiber, a porous fiber or a hollow fiber.